

Claims:

1. A panel type speaker comprising:

an exciter including bimorph type beams which are made of a piezoelectric material and in each of which a flexural oscillation is excited, and a beam holding part for holding the beams; and

a diaphragm which is attached to the exciter to generate a flexural oscillation based on oscillation transmitted from the exciter and serves as a transparent protective plate for a display,

characterized in that

a bottom surface of the beam holding part of the exciter has an area which is greater than or equal to one-fourth of an area of the largest beam of the beams, and is fixed to a surface of the diaphragm so that the exciter is held on the diaphragm.

2. The panel type speaker in claim 1,

characterized in that an acoustic characteristic regulating mechanism having a resonance point in a frequency range of the speaker is formed on a top surface of the beam holding part of the exciter.

3. The panel type speaker in claim 2,

characterized in that the acoustic characteristic regulating mechanism includes an elastic layer fixed to the flat top surface of the beam holding part of the exciter and a weight fixed on the elastic layer.

4. The panel type speaker in claim 2,

characterized in that the acoustic characteristic regulating mechanism is structured from a plated spring which is fixed to the top surface of the beam holding part of the exciter and extending along a longitudinal direction of the beams.

5. The panel type speaker in each of claims 1 to 4,
characterized in that the beams of the exciter comprise two beams having different lengths, and

characterized in that an elastic spacer is fixed to one beam to preserve a certain interval or more between the beams.

6. The panel type speaker in each of claims 1 to 5,
characterized in that the beam holding part is extended in a longitudinal direction of the beams of the exciter, contains the beams in the beam holding part, and has a box-shaped structure.